DATE: 12/20/2001

TIME: 09:26:55

OIPE

```
Input Set : A:\PTO.AMC.txt
                   Output Set: N:\CRF3\12202001\J001873.raw
     3 <110> APPLICANT: Macina, Roberto
             Recipon, Herve
     5
             Chen, Sei-Yu
     6
             Sun, Yongming
     7
             Liu, Chenghua
     8
             Turner, Leah
    10 <120> TITLE OF INVENTION: Compositions and Methods Relating to Lung Specific Genes and
Proteins
    12 <130> FILE REFERENCE: DEX-0275
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/001,873
C--> 14 <141> CURRENT FILING DATE: 2001-11-20
    14 <150> PRIOR APPLICATION NUMBER: 60/252,055
    15 <151> PRIOR FILING DATE: 2000-11-20
    17 <150> PRIOR APPLICATION NUMBER: 60/252,496
    18 <151> PRIOR FILING DATE: 2000-11-22
    21 <160> NUMBER OF SEQ ID NOS: 55
    23 <170> SOFTWARE: PatentIn version 3.1
    25 <210> SEQ ID NO: 1
    26 <211> LENGTH: 1557
    27 <212> TYPE: DNA
    28 <213> ORGANISM: Homo sapien
    30 <400> SEQUENCE: 1
    31 tgctcgagcc tgccgccata tgtgatggat aaataccttt ttttttttt ttttttccc
                                                                         60
    33 tgagaacaaa gtggtgccct gtggcctagg ctaaagtgca ggggcacaac tctcqqcaca
                                                                       120
    35 ccgcaacctt cgcctcccga ggttcaagtg aatctcctcc tgtgcctaag cgctccgtga
                                                                        180
    37 agttagcgtg ggattcacga ggccaccgtg cccaccagtg cctcagctat tttttaaaa
                                                                        240
    39 aattatttta agatagaaga cacgagggtt tctcgccaat gttgtggccg aggcttagtc
                                                                       300
    41 tetetegaae aceteetgta eacetetega ggtgtgacae tegtegeegt egeeteteag
                                                                       360
    43 agcctctccc aaagagtgtg cgtggagaaa tacaccgggc gtgtgaacgc cacaccaagt
                                                                        420
    45 gtcctgtggc ccttatacat tatattatat aaacaagtga gagaggaaca caaacatgtg
                                                                       480
    47 aaattataat gtgcacccca ccaatgtgtg tataaggcgc gctgtgcgct ctctgtgaac
                                                                       540
    49 accagaacat ctgtgttaac gtgtgtgcgc gccccaacgc ttgtgcgcgt atacacctca
                                                                       600
    51 gtggctccat tacgctgtgt tattcatccc cgtgtgttgt gttgtacacc atttgtgtgt
                                                                       660
    53 atatetegee ggeeteteee accaagaatt eteeceaaca acacaacaat ttteagaaac
                                                                       720
    55 ccacaacggt gggtaaaaca cagaacaata gaacaactca aaaaacaaca acaatacacc
                                                                       780
    57 acaaaaaaa aaaaaacaca aacaacagca aaataccaac aaactaacct aaaaccacac
                                                                       840
    900
    61 gaatcatata ccaccaatat aatatataca taaaataaaa ctatccacac aaaaaccaat
                                                                       960
    63 taatacataa aataatttaa tcatcaataa taacatctac agacaaaaat gcctacctca
                                                                       1020
    1080
    67 aaataacaaa aaataactac aaaaatcaaa acaataagaa cgaacacaac aacactaaaa
                                                                       1140
    69 atcaaacaca aataaagaca aaacaaaaca atcaaaaaca caaaaacaaa acaacaacac
                                                                       1200
    71 acaaaccaaa cacaaaaca caactaacaa ctcaaaacta actaaaaaca caacaaaaca
                                                                      1260
    73 caacaaaaac aaaaaaataa gaaataaaat acatcaataa aaaaacatga gcaatccaaa
                                                                      1320
    1380
    77 caaaaaaacat aataatagac acactaacaa cccatcaagc cacaaacaag cacaaacaaa
                                                                      1440
    79 agagacaaac caacaactac catcaacaaa caaaaaagca caaactaaaa aataaaatta
                                                                      1500
```

81 ataaaacata atactettea tetetetaaa aaatetetat atteaceeae ceacaeg

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/001,873

1557

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/001,873

DATE: 12/20/2001 TIME: 09:26:55

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\J001873.raw

- 84 <210> SEQ ID NO: 2 85 <211> LENGTH: 2122 86 <212> TYPE: DNA 87 <213> ORGANISM: Homo sapien
- 89 <220> FEATURE:
- 90 <221> NAME/KEY: misc_feature 91 <222> LOCATION: (277)..(277)
- 92 <223> OTHER INFORMATION: a, c, g or t
- 95 <400> SEQUENCE: 2 96 gtcgcggccg aggtacaagc ctttttttt ttttttttt tttttttt actttgggtg 60 98 gaaaaaaaa aaaggattaa tttgtgcctt taggggggcc tttgaatttc cctctaaaaa 120 100 taaaacctcc aactctcttt gtgcccctct atagccacat tatgccactc tgtgctctcg 180 102 gccccacaac tgtgtcgtcc cgggtccttt gaagagggag tgcagcgaca aaaagcttgt 240 104 gegeggtagt ceacteteat gtggtegtea tatatgneag ttgtgtetee gegtgtgtgt 300 106 gtgtacacat gtgtgtgtat atctctcggt cgctcacaca tatatctcac acacacaca 360 108 caccatatat agctgttaaa caaacgagca catcaaaaaa aaaataagag cagtggaaag 420 110 acgacagogg gaacgtaaac aataaagaat aaccatattt caactagott actatcacta 480 112 tacataccac actaccattt gtaaaatgca tattcacatc agttcaaact actactacaa 540 114 cacatcacaa aacatatcta tcactacatc catacacaag taaaccacaa ctacactctt 600 116 caacaccgtt cacactatcc aactccaatc tcacgtaact acaataactc aaaaaaaaac 660 118 aacctcctca tctacaaatc actccctcac ttcattctct tctaacatcc aattcaatat 720 120 caccccaaaa cgctactatt atcctctacc aacacatccc acacagcctg ccaccttcct 780 122 ccactacctc acttcatcta cctcatctct cattccacat cccatccaat cactcctgca 840 124 ttctaccaat gtccactact cacacatc acaacttagt ttccaccgac gacctctaac 900 126 cattetecce taacttetea ttetacecat etetetaata catgeaatge ageteteact 960 128 ctatatcaca tacccctcag ctattcctac ctataactaa tcaaaccacc atcacactca 1020 130 caacetcaag taccatette acateatega caceccatat caetcaccaa caactatate 1080 132 aacaaacact aattacataa ctccaattct tcacacaact acatataagt cctacccaac 1140 134 atcacaggcc acgactotac aagctottac coctcacccg acaaaaaaa cacgtttota 1200 136 attacagaaa tttgttaaac ttacaacact ccatctacta tcctactcat cactatcgta 1260 138 cateceaect tactacteaa caatactaat cateatgtee tacaagaate aacatacgaa 1320 140 acaaactgaa caattcagat ctctatgcta ctcgctgcct gatctgcgtt cctactgtct 1380 142 agoctaccot coctotactt atotgtgota otttototot aacatacaac acataccoca 144 cacaaacatc acgaatcgat caacttccca acaacgcgtc atatatcact catctctcac 1500 146 tgctctcgta acgatactca accatccaca aacttaaata cactaatcac ctcctacaca 148 gtcattcgct aacagctaac ttcattctat catcaactca cctcaatcac ataacatagc 1620 150 cacgcataag tatageegea teagegteea getaetagte taacteacte accteceact 1680 152 tatetetaat catagtatet aateteeegt cateteaact ceacagtate aettatetae 1740 154 acatcaaatc ttctatcgcc agtattcaga cattaactac actaacagca ctacacctaa 1800 156 caccgaaact cactetgace teactgetea cactactate accteteace accaetateg 1860 158 etgecacteg etcactegta etcgtecact etactegata etctecteta agaaacatet 1920 160 cactecatae acacacetet eccatteate cateaaatte taactetgat etegeaceet 1980 162 ccccactcct ccctcctact cgcccgatcc cttaccatac gactctcatc actcgatcac 2040 164 actactacac tactaccgtc acttgccttc tccacctatc tcacatcaac cattcagctc 2100 166 cacaatctac tatctacatc ca 2122
- 169 <210> SEQ ID NO: 3 170 <211> LENGTH: 575 171 <212> TYPE: DNA
- 172 <213> ORGANISM: Homo sapien

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/001,873

DATE: 12/20/2001 TIME: 09:26:55

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\J001873.raw

174	<400> SEQUENCE: 3					
	gcgtggtcgc ggccgaggta	cactcqtqac	catgattacg	tcaaagacat	gtcgaatctc	60
177	tcaaaaatag ttgtcgtcac	atgaacgcat	aagctaatca	cgtgtgttca	ctgatgetee	120
	cacactagec aatectetca					180
	gaagggcttc ggagatctct					240
183	ccttgcacgc acgctgtctc	tgtgcagtgc	tegggtgeag	agccgaacga	gcagtcgtgt	300
	gactctagcc agggtatgcg					360
	ctgtgccatg tgaattagta					420
	taacacatag attcctgggc					480
	cgagtagatt tgcatataca					540
	tctggatttc ttttatttca				-	575
196	<210> SEQ ID NO: 4					
197	<211> LENGTH: 596					
	<212> TYPE: DNA					
199	<213> ORGANISM: Homo s	sapien				
201	<400> SEQUENCE: 4					
202	gcgtggtcgc ggccgaggta	cgcctgtaat	cccagtgact	tgggaggctg	aggcaggaga	60
204	atcgcttgaa cccgggaggc	ggaggttgca	gtgagctaag	atcgcgccac	tgccctccag	120
	cctgggcgac agagcgagac					180
208	cacacaca cacacaca	aagaacctct	atctctcgta	gggccctctc	tctcagcaac	240
	cagatgaaga acgctcgtgg					300
212	tttcgtggga tcagggggaa	actgtgctcg	tgggagggca	gggagggtgg	aaaaacgcca	360
	cagcgagaga gggagagata					420
	aagacatcta tgaagtcgat					480
	ccaaaagagc gggggcagta					540
	agtgttagtc gcgctcacat	agtctccaca	caactatagg	ggaaaaggca	agaggg	596
	<210> SEQ ID NO: 5					
	<211> LENGTH: 786					
	<212> TYPE: DNA					
	<213> ORGANISM: Homo s	sapien				
	<400> SEQUENCE: 5					
229	ccctcttgcc ttttccccta	tagttgtgtg	gagactatgt	gagcgcgact	aacactcttc	60
	atcacacgag cgagacacgc					120
	tctatagtat tggggaaaga					180
	cgcttaaata catgatgtca					240
	gtttttccac cctccctgcc					300
239	aaggagagga ggagaagaga	ggaaggggta	grgargecae	gagcgttctt	catctggttg	360
241	ctgagagaga gggccctacg	agagatagag	gttetttgtg	tgtgtgtgtg	tgtgtgtgtg	420
243	tgtgtgtgtg tgtgtgtgtg	rgrgrrrrga	gatggagtct	cgctctgtcg	cccaggctgg	480
245	agtgcagtgg cgcaatcttg	gctcactgca	acctctgcct	cccgagttca	agcgattctc	540
24/	ctgcctcagc ctcccaagta	getgggatta	caggegeeca	ccatcacgtt	cagctaattt	600
243	ttgtattttt agtagagaca	gggtttegee	atgitggeta	ggctgctctc	gaacttctga	660
251	cctcaggtga tccacccacc	Leageeteee	aaagtgcagg	tattacaggc	gttacacttg	720
	cgcccagcct ctttgttctt cagcag	atacattaaa	ttttcatgga	ccgtctggag	attgagaaca	780
	<210> SEQ ID NO: 6					786
	<211> SEQ 1D NO: 6 <211> LENGTH: 1002					
	<211> LENGTH: 1002 <212> TYPE: DNA					
	<213> ORGANISM: Homo s	anien				
201	ZIO ONGRAIGH. HOMO S	ahren				

DATE: 12/20/2001

TIME: 09:26:55

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/001,873

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\J001873.raw

263	<400> SEQUENCE: 6					
	cgagagaatg atagacat	at agggccatgo	ttcatcctag	atgcatgctc	дадеддедеа	60
266	gtgtgatgga tcgtggtd	ac aaccacaata	cttttttt	tttttttt	tttttttta	120
268	tggtttaaag gtggacaa	ag ccaaaacttt	ttttttcac	cacattggaa	Cadaacccaa	180
270	attccccttg tggggtta	cc ccagggaatt	ccacqqttca	tcaaagggac	ccatttcaaa	240
272	tattgtctaa aaatctcc	gg aatggggcac	qqaqcaqqqq	gcatactagt	aacsaaaaa	300
274	cattcatccc ccaaggtt	tc ccggcgaaaa	ggagtgccg	agggtgcctg	ggggcaagaa	360
276	acagggcaga aaaggtg	ıqt qqtqqqqqa	gaaactaaac	ttgaaaaaca	cccataagaa	420
278	cgggagcagg ggcacaca	ct tggactcctc	ccqaaqqccq	taaaaagtgg	ccagaaccaa	480
280	gcgggcaata aataaggc	gc accccaaaaa	ttagatagca	gtacaaaata	aggaagatgt	540
282	tgtgggcctg ggcgccgc	gg gggccgcagg	ctqtcqtaaa	ccaccaacac	tctgggggag	600
284	gcggcagggg tgggtgtg	gg gctcgaccgg	gcqtcaaqaa	gtattgggac	acccateced	660
286	gggtgttaat cccgcggg	gg aaacccccqq	tctctcctat	aaaaaaaatt	ctcaaaacaa	720
288	aaaaaggcgg ctgggtgg	gt ggcgggggc	tcttatattt	gccccagtgt	attcgtcgga	780
290	gagcgctggg ggccagaa	ca acttqcqtqq	taaccctttg	ggaggcgcgc	gacgcttgtg	840
292	cagtgccccc cgaaatcc	gt gttcattggg	tecececege	tgtggttgat	acaacgaaga	900
294	cctcttttct gaaaaaca	ac gggggggttc	tactteteca	gcgtccccag	gacgcggcgg	960
296	gcggtgctta acttggtg	cq cqtqqacccc	tttqcqactc	CC	33033033	1002
299	<210> SEQ ID NO: 7	2 2 33				2002
	<211> LENGTH: 1417					
	<212> TYPE: DNA					
302	<213> ORGANISM: Hom	o sapien				
	<400> SEQUENCE: 7	_				
305	ccgcccgggc aggtactc	tg gaccaaataa	taaaacttct	ttgaagtgag	acgggatect	60
307	ttttagcaat tcaggaca	ct ccttatgcct	gtttggtgcc	cqcaqtqaqa	ttagacctag	120
309	cagcaaagga gatctgcg	cc gagtggccgt	aggcctgtgt	gttaggacct	ttggagaagc	180
311	ctacagcatt gagcgtaa	gt cagtgggtcg	atatgctgtc	ttccqtqqtc	atgaccactt	240
313	gcttatccgg ctcatcaa	tt tgccagcaac	agtgctacta	gctcacgcag	gtcgcgattt	300
315	tggctagtag cataagtc	tg taggttcgtc	cgtgttcatt	ttgtctaaag	ttcccatcqt	360
317	cggtagatcc catatgtc	ac atcctaggat	cataaccatg	cgcgagtgga	agacgcaatt	420
319	cctgaatgtc aaatttac	tc tagacagatt	gcagagatga	cgacatatat	tgagggtaat	480
321	acctgtcata cgaacgac	ac aagcttcata	ttaaaaatac	agcgttagta	gtgaacattg	540
323	gggtaaaaac aaatgttc	ga tccacactta	atcttgggtg	cgaaagtaag	gtagaagaac	600
325	aaagcatatt accatata	ga gttagtgagg	taggtcaccc	atcatttgac	aaqqaccaqa	660
327	caaaaacacc gtgtgttt	ga cacaacctta	tgtaggaata	gagattttac	acagagagga	720
329	ataatcgata aatataga	aa ttacaaacat	gatataagga	taccaacttt	gaggacaggc	780
331	ctaatataag ggtttggc	ca cacatcattc	gttcagcaaa	taaaacccca	gagatgtggc	840
333	accataaaga tccccact	ag ggggatccaa	gaagaagacg	cqaattttaa	acttgacccc	900
335	gtgaaattga tataagtc	cc atatctaatt	agaaggaaaa	cggaatggat	caaataaaag	960
337	aatcatatag ggagtatc	tg ttcacacgag	agatgtgatc	ccagtatcgg	qaaqacccaa	1020
339	aatagagtac ggaaggac	ac taagtacagc	cagataatat	atgaattggt	taaaaggata	1080
341	agggaatgat accaaaag	ct atcccactat	catagtaaag	cccatqqaqt	aggaaaaccc	1140
343	acccaacaat tgtatccc	ca acaggegegt	tgattaatgt	gacqaqaaaa	aaaaagtaca	1200
345	cagggaccca cacacggg	ac aattagctaa	agggaagtcc	ctaggtgaca	aaaaqqqcaq	1260
347	cacggagcaa cataagca	gg aaaacaacaa	taacqtqqqa	cacaaggtcg	gctcaaagca	1320
349	aaaccaggac cgggcaac	aa aacgccacaa	gaactcccac	cgcgtggcaa	actagtcaaa	1380
351	gcagagagca aaaaaaag	aa gatgagaagc	agagacg		-	1417
	<210> SEQ ID NO: 8					
355 <211> LENGTH: 469						

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/001,873

DATE: 12/20/2001 TIME: 09:26:55

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\J001873.raw

356	<212> TYPE: DNA					
357	<213> ORGANISM: Homo sapien					
359	<400> SEQUENCE: 8					
360	ggggaggata taatcaatat aggccaatgt	tgctcctaat	cattetegag	ccggcgctta	60	
362	gtgtgatgga tcgagcggcg ccgggcaggt	cgggcaggga	tggctcacac	ccctgtaatc	120	
364	gcaagcattt tgggaggcag aggcagaggg	aggatcactt	gagcccagga	gcttcaagat	180	
366	gagettggge aacatagtaa gatgtegtet	caaaaaacaa	acaaaaaaat	agccagtggt	240	
368	gacacatacc tgtagtccta gtcacttgag	ggactgagac	agaaggattg	cttgagccca	300	
370	gaaggttgag gctgcagtga gccatgactg	tgccactgca	ctccagctta	ggtgacagtg	360	
372	aaaccttgcc tcagaaaaaa aaaaaaaaaa	aaaaaaaaa	aaaagtttgg	gtaactggat	420	
374	gttttcccgg tttggaattt gttttcggta	cttcccaaat	taacaaggg	J	469	
377	<210> SEQ ID NO: 9					
	<211> LENGTH: 702					
379	<212> TYPE: DNA					
380	<213> ORGANISM: Homo sapien					
	<400> SEQUENCE: 9					
383	gcgtggtcgc ggcgaggtac aagaccacag	cggatgtcat	ctttgtattc	cagattcaca	60	
385	aactcatttg gtggtggcaa gacaactggc	tttggcatga	tttatgattc	cctggattat	120	
387	gcaatcgaaa aatgaaccca aacatagact	tgcaagacat	ggcctgtatg	адаадааааа	180	
389	gacctacaag caaagctaac gaagaggaac	gcaagaacag	aatgagagaa	atatcaataa	240	
391	gagactogca caatggccca cgatgttggt	gactggcacc	agaagtgatg	ctgcagattt	300	
393	ggatcacage cegaatgega gteagtgtge	tgtcagatga	atgttacgtc	tataaccacc	360	
395	tgtggacttt ttcgcaagac cgattaataa	actaaaaact	tcacaacaaa	taccacacaa	420	
397	caatacagag caagaagggc ttgggggtta	cctcaataaa	gccatttcgg	caataatccc	480	
399	cccgtgggtg agttgaacca tgttgggtta	teateceee	gacteteaca	cacatttccc	540	
401	ccacccacca agactttat tagccagcta	gcaaaaaccc	tagacaatta	atagaaggat	600	
403	agaggaggaa gcataaaaga ggttcataag	caaataaatg	ctacagagag	паласапал	660	
405	agccgatggg aatggtgaag aataaaccga	aaggcaagta	ra	gadacagaag	702	
408	<210> SEQ ID NO: 10	aajjoaajoa	gu		702	
	<211> LENGTH: 1788					
	<212> TYPE: DNA					
	<213> ORGANISM: Homo sapien					
	<220> FEATURE:					
	<pre><220> FEATORE: <221> NAME/KEY: misc_feature</pre>					
415	<222> LOCATION: (1640)(1640)					
	<223> OTHER INFORMATION: a, c, g	or t				
419	<400> SEQUENCE: 10	01 0				
	gcgtggtcgc ggccgaggta cattccgtat	cttttatttt	tttattttt	tttqqaaaaq	60	
422	cagteteget etgtegeeca gtgetggatt	acaggtage	gcaatctctt	caggadaac	120	
424	tgaaacctct ccacctctcc cggggttcac	caccatttet	tectageete	agestates	180	
426	gagatagcgt ggagattata cgggtgccgc	cctaccaaca	aggeoggat	ataattttt	240	
428	cggattattt tatagtatag gaagaacgag	agattttcca	accadatatt	taaccccaaa	300	
430	gagagtgtgc tctctcgaac tctctcgcgt	gacacettgt	taataaacto	Caacccagag	360	
432	ctctgcgtgc ctctccccac aagagtgtgc	catagogata	ttcaccacca	agatataaaa	420	
434	ccacattt ggtcccgcg gtccacatc	tetacacaaa	ttotostata	totoossoos		
436	gaaaatataa ccgcgacaaa gacctataat	ctcatatass	aatototata	tagaagaata	480	
438	tatatgtgcc cccacatata tttatagagg	tataaaaaa	acatttatta	gaagaaaaa	540	
440	actgtggttt cactctctta tagacatatt	accatotota	tataggagg	yaayaaaaad	600	
442	accccagtgc tgtgtagtgt gaagagggcg	acattateta	ataaatataa	adadatatat	660 720	
		acactatota	y cyay cy cyg	geacatttla	720	

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/001,873

DATE: 12/20/2001

TIME: 09:26:56

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\J001873.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:474 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 L:569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11

L:664 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14

 $\rm L\!:\!892~M\!:\!341~W\!:$ (46) "n" or "Xaa" used, for SEQ ID#:20

L:937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21

L:943 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21